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EXAMINER

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

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1- File Copy



Office Action Summary

Application No. **09/013,490**

Applicant

Tuzhilin et al.

Examiner

Patrice L. Winder

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2155

The MAILING DATE of this communication app	pears on the cover sheet with the correspondence address
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communica. - If the period for reply specified above is less than thirty (30) days, be considered timely. - If NO period for reply is specified above, the maximum statutory promunication. - Failure to reply within the set or extended period for reply will, by some any experience and patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on after 12. 2a) This action is FINAL. 2b) This	S SET TO EXPIRE 3 MONTH(S) FROM RR 1.136 (a). In no event, however, may a reply be timely filed ation.
closed in accordance with the practice under	
Disposition of Claims	
4) 🗓 Claim(s) <u>38, 39, 41-59, and 61-83</u>	is/are pending in the applica
4a) Of the above, claim(s)	is/are withdrawn from considera
5)	is/are allowed.
6) X Claim(s) 38, 39, 41-59, and 61-83	is/are rejected.
7)	is/are objected to.
8)	are subject to restriction and/or election requirem
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on	is/are objected to by the Examiner. Jan 16, 2001 is: a⊠ approved b) □disapproved.
Copies of the certified copies of the priority application from the International But* *See the attached detailed Office action for a list of	ave been received. ave been received in Application No documents have been received in this National Stage reau (PCT Rule 17.2(a)). the certified copies not received.
14) Acknowledgement is made of a claim for domes	tic priority under 35 U.S.C. § 119(e).
Attachment(s)	
15) X Notice of References Cited (PTO-892)	18) X Interview Summary (PTO-413) Paper No(s)17
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20)



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DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on January 16, 2001. These drawings are approved for examination purposes.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

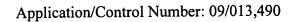
A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 38-39, 41-47, 50-59, 61-67 and 70-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunt et al., U.S. Patent No. 5,893,091 (hereafter referred to as Hunt).
- 4. Regarding claim 38, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to





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the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the information includes at least one event which is used for detecting a change on the network (keyword = event, appearance of keyword on network = change, col. 8, lines 14-20).

- 5. Regarding dependent claim 39, Hunt taught the processing device provides the at least one result to at least one user (col. 8, lines 18-20, col. 9, lines 22-27).
- 6. Regarding dependent claim 41, Hunt taught the information includes at least one condition (conditions revealed in logical Boolean expression, col. 13, lines 28-30).
- 7. Regarding claim 42, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion and having a monitoring module thereon:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to



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the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the information includes at least one event (keyword = event) and at least one condition (dependent on Boolean operator, col. 13, lines 28-30), and wherein the predefined criterion is a rule-based criterion which enables the monitoring operation to monitor for the at least one event on the network and to check if a certain condition of the at least one condition is satisfied (adapted to check for alerts that match notification criterion, col. 8, lines 16-20).

8. Regarding dependent claim 43, Hunt taught the rule-based criterion includes: at least one of a WHEN portion (1st keyword = when) and an IF portion (Boolean operator establishes condition, col. 13, lines 28-30), and a THEN portion (col. 13, lines 25-28), and

wherein the THEN portion includes a probing action which has at least one probing operator (col. 9, lines 17-21).

9. Regarding dependent claim 44, Hunt taught the probing operator includes at least one of: a particular query, a data mining query, and a further condition which provides the information based on at least one of the WHEN portion and the IF portion (information is provided based When and If, col. 9, lines 17-28).



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- 10. Regarding dependent claim 45, Hunt taught the IF portion includes the at least one condition is complex (col. 10, lines 34-39).
- 11. Regarding dependent claim 46, Hunt taught the at least one complex condition includes at least one of:

an atomic condition (single keyword), and a combination of atomic conditions (combination of keywords, col. 10, lines 43-48).

- 12. Regarding dependent claim 47, Hunt taught the atomic condition includes at least one literal portion (defined with Boolean operators, col. 13, lines 25-30).
- 13. Regarding dependent claim 50, Hunt taught the monitoring operation is performed on a client station (col. 12, lines 57-62, col. 13, lines 10-19).
- 14. Regarding dependent claim 51, Hunt taught the processing device performs the monitoring operation (col. 12, lines 57-62, col. 13, lines 10-19).
- 15. Regarding claim 52, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the



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network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the at least one result includes a copy of at least one monitored predicate (result includes copy of particular argument values specific to result = predicate, col. 10, lines 49-53).

16. Regarding claim 53, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

wherein the at least one result includes a copy of a portion of at least one monitored predicate (result includes copy of particular argument values specific to result = predicate, in this example a small portion of the available stock information values, col. 10, lines 49-53).



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- 17. Regarding dependent claim 54, Hunt taught the monitoring operation is performed by exploring particular data on client sites which are connected to the network (using local keyword profiles, col. 7, line 65 col. 8, line 3).
- 18. Regarding dependent claim 55, Hunt taught an atomic condition (single keyword), and a combination of atomic conditions (combination of keywords, col. 10, lines 43-48).
- 19. Regarding dependent claim 56, Hunt taught the at least one event is one of an instantaneous event (appearance of alert = instantaneous event) and an event which extends over a period of time (col. 8, lines 12-20).
- 20. Regarding dependent claim 57, Hunt taught the WHEN portion is used to monitor for an occurrence of at least one event (occurrence of keywords in alerts, col. 13, lines 25-28).
- 21. The language of claims 58-59, 61-67, 70-77 is substantially the same as previously rejected claims 38-39, 41-47, 50-57. Therefore, claims 58-59, 61-67, 70-77 are rejected on the same rationale as previously rejected claims 38-39, 41-47, 50-57.
- 22. Regarding claim 78, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to



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the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a particular operation to continuously monitor the information on the network as a function of the predetermined criterion (receiving alerts as issued from the Timely Information Server = continuously monitor, col. 9, lines 13-21), the processing device is adapted to receive data from the network based on at least one result of the particular operation (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19).

- 23. Regarding dependent claim 79, Hunt taught the at least one result is obtained when at least one condition is satisfied (result when match notification criterion, col. 8, lines 16-20).
- 24. Regarding claim 80, Hunt taught a method for monitoring information on a network, comprising:

receiving a predefined criterion (col. 9, lines 57-61);

continuously monitoring the information on the network as a function of the predefined criterion (receiving alerts as issued from the Timely Information Server = continuously monitor, col. 9, lines 13-21); and

receiving data from the network based on at least one result of the monitoring step (col. 9, lines 13-21).

25. Regarding dependent claim 81, Hunt taught further comprising the step of:
obtaining the at least one result when at least one condition is satisfied (result when match
notification criterion, col. 8, lines 16-20).



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26. Regarding claim 82, Hunt taught an apparatus for monitoring information on a network, comprising:

a storage device storing a predefined criterion (notification criterion), and having a monitoring module thereon (modules for comparing alerts with keywords of notification criterion, col. 7, line 63 - col. 8, line 2); and

a processing device executing the monitoring module to transmit at least one instruction to the network (client registration to receive alerts = request, col. 8, lines 52-55), the at least one instruction requesting a performance of a particular operation to regularly monitor the information on the network as a function of the predetermined criterion (Timely Information Server regularly derives alerts and regularly broadcasts alerts = regularly monitoring, col. 12, lines 6-9), the processing device is adapted to receive data from the network based on at least one result of the particular operation (parsing and filtering engine 88, col. 8, lines 16-20, col. 13, lines 10-19)

27. Regarding claim 83, Hunt taught a method for monitoring information on a network, comprising:

receiving a predefined criterion (col. 9, lines 57-61);

regularly monitoring the information on the network as a function of the predefined criterion (Timely Information Server regularly derives alerts and regularly broadcasts alerts = regularly monitoring, col. 12, lines 6-9); and

receiving data from the network based on at least one result of the monitoring step (col. 9, lines 13-21).



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Claim Rejections - 35 USC § 103

- 28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

- 29. Claims 48-49 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt in view of A. Prasad Sistla et al., Temporal Conditions and Integrity Constraints in Active Database Systems (hereafter referred to as Sistla).
- 30. Regarding dependent claim 48, Hunt does not specifically teach the atomic condition includes at least one binary past temporal operator. However, Sistla taught an atomic condition includes at least one binary past temporal operator (page 4, Section 4.1, paragraph 1).
- 31. Regarding dependent claim 49, Hunt does not specifically teach the atomic condition includes at least one unary past temporal operator. However, Sistla taught atomic condition includes at least one unary past temporal operator (page 4, Section 4.1, paragraph 1).
- 32. As to claims 48-49, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Sistla's Past Temporal Logic in Hunt's monitoring



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system would have improved the monitoring system's effectiveness by incorporating more flexible monitoring criterion. The motivation would have been because Past Temporal Logic can be combined with any query language and proves improved condition-action statements used in active monitoring.

33. The language of claims 68-69 is substantially the same as previously rejected claims 48-49. Therefore, claims 68-69 are rejected on the same rationale as previously rejected claims 48-49.

Conclusion

- 34. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive (see Interview Summary, paper #12, December 6, 2000) and, therefore, the finality of that action is withdrawn.
- 35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Davies et al., U.S. Patent No. 5,931,907: a system for accessing information stored in a distributed information database by using agents which uses keyword sets and user profiles to determine information of interest to a user; and
- b. Tso et al., U.S. Patent No. 6,047,327: a server selectively distributes information to a client based on a filter by deriving a set of InfoBites, filtering the set of InfoBites and transmitting the filtered set of InfoBites to the client.



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36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is (703) 305-3938. The examiner can normally be reached on Monday-Friday from 10:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached on (703) 305-9648. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Patrice Winder Patent Examiner Art Unit 2155

atuce L. Winder